BRIEF IN SUPPORT OF PETITION

OPINIONS BELOW.

The District Court's opinion, with findings and conclusions (R. Vol. I, pp. 153 to 165) is reported in 41 F. Supp. at page 345.

The opinion of the Circuit Court of Appeals (R. Vol. XII, pp. 5568 to 5576) is reported in 130 F. (2d) at page 589.

JURISDICTION.

The decision of the Circuit Court of Appeals below was filed September 5, 1942 (R. Vol. XII, pp. 5568-5576). Petition for Rehearing was filed September 26, 1942, and denied October 12, 1942 (R. Vol. XII, p. 5598). Jurisdiction to issue the writ rests on Section 240 (a) of the Judicial Code (28 U. S. C. Sec. 347) as amended by the Act of February 13, 1925.

STATEMENT.

The facts and rulings material to the consideration of the questions presented are fully stated in the foregoing petition.

SUMMARY OF ARGUMENT.

The Points of the Argument follow the reasons relied upon for the allowance of the writ of certiorari.

ARGUMENT

I.

The decision of the Court of Appeals below erroneously follows the overruled case of *Mitchell* v. *Tilghman*, 19 Wall. 287; and is in conflict with the controlling decision of this Court in *Tilghman* v. *Proctor*, 102 U. S. 707.

In the instant case, the Court of Appeals below has applied the rule and reasoning of the decision in the overruled case of *Mitchell* v. *Tilghman*, 19 Wall. 287, in construing the two pioneer patents here in suit, and this despite the fact that the *Mitchell* case was not cited in the briefs of either party or at the argument. In this respect, the Court of Appeals below concluded that each of the two patents in suit was confined, not to the *process* described and claimed therein, but rather to the particular apparatus and to the particular mode of applying the process which was pointed out in the specification thereof to show that the patented process was capable of being performed in actual experience.

In respect of patent No. 1,819,923 (the resistivity patent) the Court below said that "We cannot doubt that the teaching of this patent is, that with ordinary apparatus in a drill hole readings shall be made of electrical reactions which are to be used in a formula to calculate the specific resistivity of the rocks or earth between the electrodes * * * In the process of appellant * * * no formula is used, nor any effort made to calculate specific resistivities. * * * There is no infringement if the patent is valid. Compare *Mitchell* v. *Tilghman*, 19 Wall. 287."

In respect of Patent No. 1,913,293 (the porosity patent) the Court below concluded that the practice of the process of this patent in an operation which used "the same cable and instruments in making all the desirable curves in one quick operation" was tantamount to the use of a different process merely because additional apparatus than that disclosed in the patent was required to enable one to practice the two methods *simultaneously*.

In the instant case, however, the Court of Appeals below did not rest its decision on the issue of infringement. It held that the process of each of the two patents in suit, as construed by it, lacked the patentable utility required by statute because the commercial operations of the art and industry which these patents in suit had, *per se*, created, comprehended "many *refinements* of method and *improvements* in apparatus" over the "simplicities" of the patent disclosures.* In this connection the Court of Appeals below said that (R. Vol. XII, pp. 5571, 5576):

> "Neither patent practiced by itself would have had any success. The older patent (1,819,923) was a commercial failure till combined with the second (1,913,293) and the combination made little progress until both the processes and instruments were changed to eliminate inaccuracies in ways, some also patented, which greatly enhanced, if they did not wholly produce the commercial success. * * * The commercially successful logs are the result of *improvements* and changes

* In so finding the Circuit Court was in error, but the discussion of its error of law in applying an erroneous rule of construction is presented for purposes of argument in this section of the brief, with an acceptance of its errors of fact. The error of the Court of Appeals below in ignoring the findings of fact by the Trial Court, is treated in the second section of this brief.

> that required much research and experiment and which were themselves in many cases found worthy of patents. * * * We think that what Schlumberger in the disclosures of these patents gave to the public is not such as the statute contemplates * * * We therefore adjudge the contested claims of each patent invalid. * * *"

The decision of this case in *Tilghman* v. *Proctor*, 102 U. S. 707, has stood since 1881 as the applicable law for questions involving the construction of process patents. The rule of that case is that a process patent shall be construed as such, and shall not be limited to the particular apparatus or the particular mode of applying and using the process pointed out in the specification.

The peculiar history of the litigation involving Tilghman's patent No. 11,766 in issue in the *Proctor* case, lends emphasis to the rule.

Tilghman's patent was for a process for obtaining fatty acids and glycerine from fatty bodies by the action of water at high temperature and pressure. It was first before the Supreme Court in *Mitchell* v. *Tilghman* (1874), 19 Wall. 287. In the *Mitchell* case the Court construed the patented process as limited to the particular mode of applying and using the process which the patentee, pursuant to the statutory requirements, had pointed out in the specification. Such construction necessarily read into the patented process non-essential apparatus as well as limitations. So construed, the Court indicated doubt as to the validity of the patent because the disclosed apparatus and the described mode of applying the disclosed process appeared to lack utility for *commercial* practice, but concluded that the patent was not infringed.

Seven years later *the same patent* was again before this Court in the *Proctor* case. In deciding the *Proctor* case, the Court expressly overruled the *Mitchell* case, holding that:

> "* * * the court is unanimously of the opinion, contrary to the decision in the *Mitchell* case, that the patent of Tilghman must be sustained as a patent for a process, and not merely for the particular mode of applying and using the process pointed out in the specification, * * *." (102 U. S. at p. 708).
>
> "In the case of *Mitchell*, the majority of the court was of opinion that in the application of the process thus claimed the patentee was confined to the method of using the process particularly pointed out in the specification; * * *." (102 U. S. at p. 709).
>
> "* * * On further reflection, we are of opinion that, in the case referred to, sufficient consideration was not given to the fact that the patent is for a process, and not for any specific mechanism for carrying such process into effect." (102 U. S. at p. 710).

In respect of the nature of the disclosures required of process patents by the Statute, and the effect of such disclosure upon the construction to be accorded such patent, the Court, in the *Proctor* case, said:

> "* * * There is, then, a description of the process and of one practical mode in which it may be applied. Perhaps the process is susceptible of being applied in many modes and by the use of many forms of apparatus. The inventor is not bound to describe them all in order to secure to himself the exclusive right to the process, if he is really its inventor or discoverer. But he must describe some particular mode, or

> some apparatus, by which the process can be applied with at least some beneficial result, in order to show that it is capable of being exhibited and performed in actual experience." (102 U. S. at pp. 728-729).

The law applicable to the construction of process patents, as laid down by this Court in the *Proctor* case, is plain and unequivocal.

No pioneer patent "creating a new art" (*Eibel Process Co.* v. *Minnesota & Ontario Paper Co.* (1923), 261 U. S. 45, 63), as the patents in suit admittedly did, could survive such a test of ultimate commercial perfection of apparatus as the Court of Appeals has employed in the instant case. The test itself is indicative of the extent to which the Court of Appeals below felt justified in departing from the controlling decisions of this Court in order to invalidate the two pioneer patents in suit. It is directly in conflict with the decisions of this Court in *Tilghman* v. *Proctor, supra,* as well as in *The Telephone Cases* (1888), 126 U. S. 1, 536; and *Hildreth* v. *Mastoras* (1921), 257 U. S. 27, 34. In *Tilghman* v. *Proctor,* this Court, in repudiating its earlier decision in the *Mitchell* case, followed by the Court below, held that a patent for a process, irrespective of the described apparatus or the particular mode of applying the disclosed process, satisfies the statute provided it described some apparatus or some mode of applying the process "by which the process can be applied with at least some benefical result".

In *The Telephone Cases, supra,* this Court stated that (at 126 U. S. 536):

> "The law does not require that a discoverer or inventor, in order to get a patent for a process,

> must have succeeded in bringing his art to the highest degree of perfection. It is enough if he describes his method with sufficient clearness and precision to enable those skilled in the matter to understand what the process is, and if he points out some practicable way of putting it into operation. This Bell did. * * *"

In *Hildreth* v. *Mastoras, supra,* the Court said (257 U. S. at p. 34):

> "* * * It is not necessary, in order to sustain a generic patent, to show that the device is a commercial success * * * if it actually and mechanically performs, though only in a crude way, the important functions by which it makes the substantial change claimed for it in the art, it is enough. * * *"

This established rule governing the construction of claims for processes was followed by this Court in *Smith* v. *Snow* (1935), 294 U. S. 1, 11.

No patents ever presented to this or any other Court are more entitled than the patents in suit to be designated "pioneer" or "generic" patents. In these circumstances, it is submitted that this Court should review the decision below and correct the injustice which follows from and is inherent in the obviously bad law applied by the Fifth Circuit Court of Appeals in construing the two patents in suit, and in judging the utility of the *processes* disclosed by such patents in terms of the commercial acceptabilities of the particular *apparatus* disclosed in the patents.

II.

The decision of the Court of Appeals below is in conflict with the proper construction of the Statute (U. S. C. Title 35, Sec. 33) and the applicable decisions of this Court.

The opinion of the Court below is somewhat confusing, but from its disparagement of the exceptional utility of the inventions in suit, its repeated references to alleged later "refinements of methods and improvements in apparatus", and its statement of its own view that one skilled in the art could not practice the inventions in a useful manner from the teaching of the patents, it seems apparent that it has misconstrued the Statute as to the nature of the disclosure required for one skilled in the art; as to the function of the claims, as distinguished from the function of the specification, in labeling what is claimed to be new and useful; and as to the nature of processes or methods as distinguished from the particular modes of applying them and the apparatus employed.

The correct rule of construction of the nature of the disclosure required in process patents is stated in *Tilghman* v. *Proctor* (102 U. S. at pp. 728, 729), where this Court said:

> "* * * There is, then, a description of the process and of one practical mode in which it may be applied. Perhaps the process is susceptible of being applied in many modes and by the use of many forms of apparatus. The inventor is not bound to describe them all in order to secure to himself the exclusive right to the process, if he is really its inventor or discoverer. But he

> must describe some particular mode, or some apparatus, by which the process can be applied with at least some beneficial result, in order to show that it is capable of being exhibited and performed in actual experience."

The same rule was expressly stated in *The Telephone Cases* (126 U. S. at p. 535) and in *Hildreth* v. *Mastoras* (257 U. S. at p. 34; cf. Brief, pp. 26 and 27 *ante*). The construction employed by the Court below in the instant case was in direct violation of this established rule. It determined whether or not the Statute was satisfied by comparing the particular mode of applying the patented processes and the particular apparatus employed commercially, with the particular mode of applying the processes and the particular apparatus disclosed in the patents. Because the two processes are practiced *simultaneously* for convenience, in commercial use, the Court erroneously concluded that the processes as disclosed and claimed were not practiced and hence not useful within the meaning of the Statute. This was clearly error, and clearly contrary to the requirements of the Statute.

The Court below appears to have been further confused in suggesting that the disclosures do not label what is new (as compared to what is old). For example, in connection with the porosity patent, the Court said, R. Vol. XII, p. 5576: "In not a single place is there any clear statement that the applicant for the patent has discovered anything, and what it is." If this statement means (as it appears to) that an applicant is required to label what is new in his specification, it is clearly in conflict with the express

ruling by this Court in *The Corn-Planter Patent* (90 U. S. 181, 222) in which the Court disposed of this very contention by saying:

> "* * * There is nothing in the patent law which, in terms, requires the patentee to do this. * * * But what can be a more explicit declaration of what is new and what is old than the summary of the patentee's claim at the close of the specification * * *."

Both patents in suit distinctly point out in the claims what is claimed to be new and useful. Claim 1 of the porosity patent for example, recites the steps of procedure comprising a complete process, and as to one of these steps is expressly limited to electrical measurements of "differences of potential" in the water at various depths. The language of the specification conforms to the claim, in that it states:

> "The electric current (spontaneously generated by filtration) gives rise by ohmic effect to differences of potential, and the measurement of these differences constitutes the basis of the process herein described.
>
> * * *
>
> The inspection of the diagram therefore makes it possible to locate the various porous layers traversed by the drill hole and to measure their depth and thickness" (Pat. p. 1, l. 59; p. 2, l. 7, R. Vol. VI, p. 3827).

Hence, what is described and what is claimed is clear and unequivocal; both parties follow the practices described and claimed, in their commercial work.

Similarly, in the resistivity patent, claim 1, for example, requires the measurement of the electrical specific resistivity of the formations encountered at

different depths, and such measurements are made in water contained in the drill hole. In the making of such measurements the patent states:

> "The measure of the potential between the electrodes M and N in the water is then equivalent to a measure made inside the earth at distances r and r' from the electrode A" (Pat. p. 2, l. 25, R. Vol. V, p. 3251).

The electrical process as claimed conforms to the teaching of the specification. The process described has been practiced successfully. The disclosure and claim clearly meet the requirements of the Statute.

It is clear that the Court's errors in construing the Statute resulted from its wrong premise in adopting the principle of construction in the overruled case of *Mitchell* v. *Tilghman, supra* (discussed under Point I in this brief). Since this principle of construction in the *Mitchell* case was expressly overruled by this Court in *Tilghman* v. *Proctor, supra*, the premise of the Court below necessarily was false and the application of the Statute to this false premise necessarily resulted in error. In these circumstances it would appear to be clear that an injustice has been done to petitioner.

III.

The decision of the Court of Appeals below is in conflict with the accepted and usual course of judicial procedure as laid down by Rule 53a of the Federal Rules of Civil Procedure and the controlling decisions of this Court in *Davis* v. *Schwartz* (1895), 155 U. S. 631, 636, and *Adamson* v. *Gilliland* (1917), 242 U. S. 350, 353.

The Court of Appeals below, in several instances, reversed findings of fact which were made by the District Court. Many erroneous statements by the Court of Appeals involve conclusions in which it has substituted its own opinion for the testimony accepted by the District Court and on which it based its findings. Many of these statements involve conclusions as to technical facts on which the Court of Appeals could not have been qualified and as to which the District Court had to make findings in the light of the conflicting testimony and credibility of expert witnesses.

In arriving at such findings the Court of Appeals below rendered a decision in direct conflict with the accepted and usual course of judicial procedure as laid down by Rule 53a of the Federal Rules of Civil Procedure and by the decisions of this Court in *Davis* v. *Schwartz* (1895), 155 U. S. 631, 636, and *Adamson* v. *Gilliland* (1917), 242 U. S. 350, 353.

The following erroneous statements of fact were made by the Court of Appeals in conflict with the findings of the District Court:

> "Neither patent practiced by itself would have had any success" (R. Vol. XII, p. 5571).

"The older patent was a commercial failure till combined with the second, and the combination made little progress until both the processes and instruments were changed to eliminate inaccuracies in ways * * * which greatly enhanced if they did not wholly produce the commercial success (R. Vol. XII, p. 5571).

"The necessary substitution of alternating current for the direct current which was shown in the first patent, and the special apparatus necessary to use the same cable and instruments in the making of all the desirable curves in one quick operation, and to eliminate disturbing intrusions, were things that were slow in coming, and the results of independent research and experiment" (R. Vol. XII, p. 5576).

"As to both these patents we are further of opinion that no sufficient disclosure of methods is made to enable any one to make useful electrical logs solely by their teaching and the knowledge of one skilled in electricity and well drilling" (R. Vol. XII, p. 5576).

"The appellee and its predecessor began in 1929 an effort to make these electrical investigations about 'resistivity', but without any commercial success, at least in the United States" (R. Vol. XII, p. 5570).

"* * * the definite calcualtion of specific resistivity * * * is not useful, and is not used" (R. Vol. XII, p. 5574, referring to the resistivity patent No. 1,819,923).

The District Court, after a trial lasting thirty court days, filed its findings of fact and conclusions of law, in accordance with the provisions of Rule 52 of the Rules of Civil Procedure. Its findings embraced the

technical points set forth above from the opinion of the Court of Appeals and were contrary to the statements made by that Court.

As to the operativeness of the method disclosed in resistivity patent No. 1,819,923, the District Court held that:

> "The mechanism described in Plaintiff's Patent No. 1,819,923 and the Drawings accompanying and which are a part of same, when used in the manner designated in the Patent * * * and used in connection with some character of indicator (such as P in such Patent and Drawings) will register on such indicator as such mechanism is used in and descends or ascends in such drill hole. When such mechanism is so used in connection with a chart making or recording mechanism there are produced charts, records, etc. (called logs) * * * If the mechanism described in the Patent be not used in connection with a chart or record making register, it may be used with some simpler character of register, and action of the register recorded by hand" (R. Vol. I, p. 156).

As to the operativeness of the method disclosed in the porosity patent No. 1,913,293, the District Court found:

> "The mechanism described in Plaintiff's Patent No. 1,913,293, when used in the manner and under the conditions mentioned in the Patent and in connection with a chartmaking or recording mechanism, also produces charts or records (called logs) * * *" (R. Vol. I, p. 156).

As to the said logs thus produced by the mechanisms described in the two patents when used in the manner designated in said patents, the District Court found:

> "These logs * * * enable a conclusion to be reached as to the geological formation in such

area. The conclusion is usually found correct and accurate, and the oil industry has found such logs very dependable and valuable. (c) The process, mechanism etc. described in and covered by Patent No. 1,819,923 were * * * useful * * * The process, mechanism etc. described in and covered by Patent No. 1,913,293 were * * * useful * * *" (R. Vol. I, p. 157).

As to the unwarranted assertion by the Court of Appeals that there was any lack of successful operation or of successful exploitation, because of delay which it erroneously ascribed to later refinements of method and apparatus, the District Court found:

"(d) The evidence shows that while due to economic conditons throughout the country [commencing in 1930] which affected the oil industry, the Patents in suit were not immediately profitable, that later they became very profitable, and Plaintiff began doing, and has since been doing, a very large and profitable commercial business in the manufacture, use, renting etc. of the processes and mechanism etc. covered thereby. Defendant contends that Plaintiff is not using, and has not been using the processes, mechanism etc. covered by its Patents. This contention is not correct. The evidence shows that Plaintiff has been and is now using the processes, mechanisms described in its Patents" (R. Vol. I, p. 158).

The utility and commercial suitability of the methods in suit are further established by the finding of the District Court as to the use of such methods by the Respondent. The District Court found:

"(e) I have had little or no difficulty on the question of whether defendant has infringed

> plaintiff's patents. I think the evidence supports and compels a finding, and I find, that the processes, mechanism, etc. which defendant is manufacturing, using, renting, etc. are substantially identical with those covered by plaintiff's patents, and infringes those claims which plaintiff has involved in this suit" (R. Vol. I, p. 158).

The foregoing Findings of Fact by the District Court Judge depended upon the conflicting testimony and credibility of witnesses heard by him, except as to the successful use of the resistivity method alone in the United States, and the temporary suspension of commercial activities due to "economic conditions". These latter findings were based on evidence offered by petitioner; no contrary evidence was offered by the Respondent. Accordingly, the Court of Appeals had no evidence before it to support its statement that the resistivity method was not practiced with commercial success in the United States in 1929, and that the commercial success of the patented methods awaited, and was dependent upon, later refinements of method and apparatus.

Nor was there any evidence before the Court of Appeals to support its gratuitous statement that "Neither patent practiced by itself would have had any success." The only evidence bearing on this point shows that the resistivity method was practiced successfully by itself. The undisputed evidence of record shows that, in the surveys conducted by the petitioner's predecessor in Oklahoma in 1929, the method described in the resistivity patent, with all its "simplicities", was followed *literally* and successfully in obtaining over thirty logs (R. Vol. III, pp. 2243-2252). This precise method, at that time, was also in commercial use in France and Venezuela

(R. Vol. III, p. 2251). In view of the reduction in drilling incident to the depression in 1930, and the fact that the resistivity method was being profitably exploited at that time in Venezuela, the equipment was sent from the United States to that country in July, 1930 (R. Vol. III, p. 2260).

This evidence conclusively establishes the error of the Court of Appeals in holding that the resistivity patent No. 1,819,923 does not teach one skilled in the art to make successful logs; that neither patent practiced by itself would have had success; and that the resistivity method depended for success upon later refinements or any refinements of methods and apparatus, or its combination with the porosity method.

The evidence establishes, and the District Court found, that the porosity method is used by both parties. There is no difference between what the respondent does commercially and what is described in the patent (R. Vol. III, pp. 2370, 2371). There is no dispute as to the purpose for which respondent's porosity curve is run; it is the same purpose as that described in the patent in suit, namely, to reveal "fluid permeability of the formations" (R. Vol. VI, p. 3883). The respondent has not denied, and the testimony shows, that the porosity method is not modified or affected by the fact that the resistivity method is carried on simultaneously (R. Vol. 1, pp. 327, 328). The opinion of the Court of Appeals, in which it disparaged the utility of the two patented methods, considered separately, confined its tribute to the practice of the methods *simultaneously*. This treatment was wholly unjustified and unfair. In practice, both methods retain their complete and separate identities, as disclosed in the respective patents in suit, even though they are carried on simultaneously. The opinion of the Court of Appeals shows clearly that it mis-

takenly believed that the utility of the two patented methods which created the art of electrical logging should be ignored, merely because they are practiced *simultaneously* rather than separately.

The statement by the Court of Appeals that the calculation of specific resistivity as disclosed in patent No. 1,819,923 is not made and "is not useful and is not used" is likewise contrary to the evidence which supports the findings of the District Court. The evidence of record is that samples of earth were taken from a well and their resistivities measured by approved laboratory technique; and that the ascertained specific resistivity values of these samples were substantially identical with the specific resistivity values shown on the curve of petitioner's commercial log taken in that well at the same depths from which said samples were taken (R. Vol. IV, pp. 2470-2474). The defendant's commercial log taken in the same well on the same day showed substantially the same resistivity values at such depths (R. Vol. IV, p. 2481). *This testimony was in no way refuted or contradicted by respondent.* Such testimony establishes that the value of the specific resistivity of formations traversed is shown on electrical logs and that the method described in the resistivity patent is practiced in this respect.

The Court was also mistaken in saying that strata which are unhomogeneous do not have an ascertainable specific resistivity. All strata, whether roughly homogeneous or not, have a measurable specific resistivity *in situ*.

It is immaterial whether the particular formation under investigation is truly homogeneous as the patent recognizes that it may be only "roughly homogeneous" (R. Vol. V, p. 3250; pat. p. 1, l. 98). Actu-

ally, most of the sediments of the Lower Gulf Coast region are "homogeneous sediments, unconsolidated" (R. Vol. I, p. 193). Accordingly, specific resistivity can be and is "affirmed of them", contrary to the statement of the Court of Appeals.

The resistivity patent clearly instructs one to make a log on which is shown the resistivities of the formations and, necessarily, the "variations" of such resistivities. The patent states that the "measurements taken along a drill hole are given in the form of a diagram of the resistivities of the rocks at different depths" and that "this 'electrical log' shows the depth of the geological horizons such as the top of any given formation" (Pat. Spec. p. 1, l. 32, R. Vol. V, p. 3250). Such a diagram shows the "variations" and from these "variations" one may locate the depth of the top and bottom boundaries of formations traversed. The Court below held, in effect, that such a process is not that "disclosed in the patent", despite the explicit descriptive matter quoted from the specification.

As to the prior art, alleged to bear on the resistivity method, the Court of Appeals referred generally to it, and to earlier patents of Schlumberger.* These patents relate merely to proposed electrical "prospecting" methods (of no commercial value) carried on along the surface of the earth or in mine shafts (not filled with water) to locate buried metallic deposits. By moving separate electrical contact members about freely and varying their spacings, it was hoped that a buried metallic mass would constitute such an anomaly as to give indications of its presence. No unitary electrical device was provided nor were local measurements obtained

* These patents are found in the Record at Vol. VII, p. 4187, and Vol. VIII, p. 4604.

in a bore hole filled with water, of the specific resistivity of strata *in situ* traversed by a bore hole. No "electric log" showing the top and bottom of strata traversed, nor from which could be deduced the nature of such strata, was obtained or obtainable or sought to be obtained, by any method disclosed or suggested in the prior art. While the Court of Appeals referred to the prior art, it did not discuss its application to the resistivity method claimed in the patent in suit and did not rest its decision on lack of novelty.

As to the porosity patent No. 1,913,293, the Court of Appeals said that "the claim (1) is too broad", without, however, asserting that the limitations of the claim or the steps comprising the method, are found in the prior art. The patentee expressly stated in his specification that the spontaneous current generated by filtration "gives rise by ohmic effect to differences of potential, and the measurement of these differences constitutes the basis of the process herein described" (R. Vol. VI, p. 3827; pat. p. 1, l. 59). The claim expressly requires the measurment in the water of such spontaneous "differences of potential". As to the utilization of the phenomenon of electrofiltration and the discovery of electrical conditions created by it, and the mode of operation to which he limited himself, the patentee stated: "Such a filtration gives rise to an electric current which may be observed by measuring the differences of potential it creates in the water contained in the drill hole, exactly at the level of the porous stratum" (R. Vol. VI, p. 3827; pat. p. 1, l. 78). After describing the making of a diagram (log) showing such measured "differences of potential", the patentee pointed out: "The inspection of the diagram therefore makes it

possible to locate the various porous layers traversed by the drill hole and to measure their depth and thickness" (pat. p. 2, l. 7). Contrary to the statement of the Court of Appeals, the claim is limited to the utilization of the spontaneously generated current by *electrical* measurements in the water, and *electrical* measurements of a specific character, namely, "differences of potential", in the water opposite the sands. Others are free, so far as the claim goes, to utilize for the same purpose such electro-filtration phenomenon in bore holes, by the making of other measurements than those claimed, such as electro-magnetic or radio wave measurements—anything except "differences of potential".

There is no prior art suggesting any electrical process of any nature whatsoever for identifying porous formations in the earth. It necessarily follows, and is the fact, that no electrical process carried on in a drill hole filled with water and in which "differences of potential" generated spontaneously by filtration are measured, is suggested in the prior art. In so far as the claim distinctly differentiates from the prior art, it cannot properly be said out-of-hand that it is "too broad". The Court of Appeals did not hold that it reads on the prior art, but nevertheless unwarrantably said that "the claim is too broad".

Conclusion.

The opinion below is confused, in that it makes a number of carping criticisms of these patents and then rests its conclusions on other grounds. The opinion seems to involve the idea that a number of unsound points add up to a good one. The statement that the patents do not disclose enough to enable one

skilled in the art to apply the inventions suggests that what would be obvious to one skilled in the art is always obvious to a Court. Despite these confusions, it is clear that the Court below applied erroneous (and overruled) principles of patent law of general application and importance to this case and in that respect certiorari is justified under Rule 38 (5b) of this Court. That error was fundamental and was the premise on which later erroneous conclusions of the Court below were based.

The disregard of the Trial Court's findings in the face of ample evidence to support them is a plain disregard of the decisions of this Court.

These are pioneer patents creating an important new art and the petitioner ought not now be denied a review, because a conflict between circuits has not arisen under war conditions which prevent such a conflict arising.

Respectfully submitted,

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December, 1942.

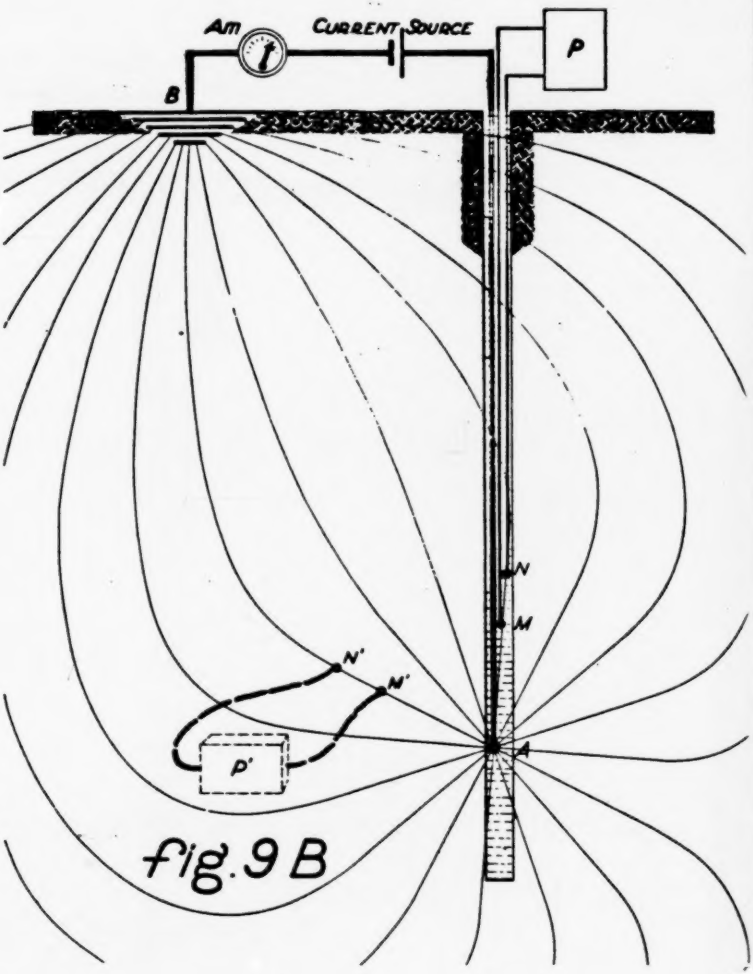


fig. 9 B

Exhibit 47.

(PHOTOPRINT.)

Exhibit 32.

(PHOTOPRINT.)

[*For the Convenience of Court and Counsel this Exhibit (Photostatic Copy) is Bound in on the Opposite Page.*]

fig. 13A

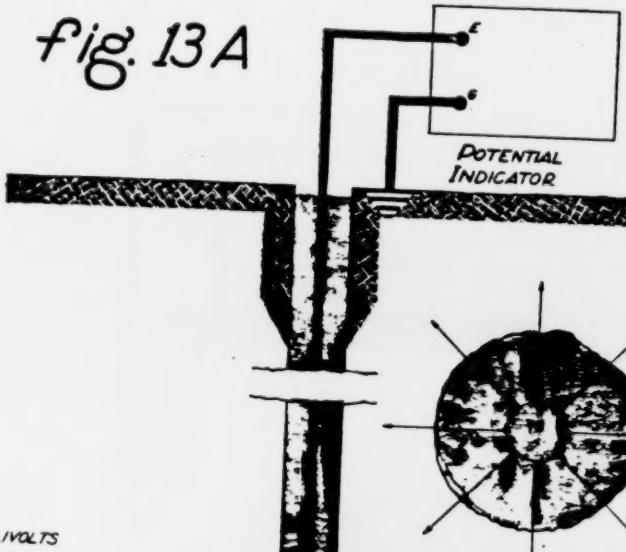




fig. 13B

